# Clinical trial results:
# A phase IV, open, multi-centre study to assess the immunogenicity, reactogenicity and safety of two doses of GSK Biologicals' oral live attenuated human rotavirus (HRV) vaccine in healthy Taiwanese infants who received hepatitis B immunoglobulin after birth.

## Summary

| | |
|---|---|
| EudraCT number | 2011-003731-63 |
| Trial protocol | Outside EU/EEA |
| Global end of trial date | 18 April 2011 |

**Results information**

| | |
|---|---|
| Result version number | v2 (current) |
| This version publication date | 05 March 2023 |
| First version publication date | 12 June 2015 |
| Version creation reason | • Correction of full data set<br>Correction of full data set and alignment between registries. |

## Trial information

**Trial identification**

| | |
|---|---|
| Sponsor protocol code | 114351 |

**Additional study identifiers**

| | |
|---|---|
| ISRCTN number | - |
| ClinicalTrials.gov id (NCT number) | NCT01198769 |
| WHO universal trial number (UTN) | - |

Notes:

**Sponsors**

| | |
|---|---|
| Sponsor organisation name | GlaxoSmithKline Biologicals |
| Sponsor organisation address | Rue de l'Institut 89, Rixensart, Belgium, B-1330 |
| Public contact | Clinical Trials Call Center, GlaxoSmithKline Biologicals, 044 2089904466, GSKClinicalSupportHD@gsk.com |
| Scientific contact | Clinical Trials Call Center, GlaxoSmithKline Biologicals, 044 2089904466, GSKClinicalSupportHD@gsk.com |

Notes:

**Paediatric regulatory details**

| | |
|---|---|
| Is trial part of an agreed paediatric investigation plan (PIP) | No |
| Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial? | No |
| Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial? | Yes |

Notes:

## Results analysis stage

| | |
|---|---|
| Analysis stage | Final |
| Date of interim/final analysis | 18 April 2011 |
| Is this the analysis of the primary completion data? | Yes |
| Primary completion date | 18 April 2011 |
| Global end of trial reached? | Yes |
| Global end of trial date | 18 April 2011 |
| Was the trial ended prematurely? | No |

Notes:

## General information about the trial

Main objective of the trial:

To assess the immunogenicity of GSK Biologicals' HRV vaccine in terms of serum anti-rotavirus (anti-RV) immunoglobulin A (IgA) antibody seroconversion rate (SCR), 2 months post-Dose 2 (i.e. at study Month 4) of the HRV vaccine.

Protection of trial subjects:

All the subjects were observed closely for at least 30 minutes, with appropriate medical treatment readily available in case of anaphylaxis following the administration of vaccine.

Background therapy: -

Evidence for comparator: -

| | |
|---|---|
| Actual start date of recruitment | 11 November 2010 |
| Long term follow-up planned | No |
| Independent data monitoring committee (IDMC) involvement? | No |

Notes:

## Population of trial subjects

### Subjects enrolled per country

| | |
|---|---|
| Country: Number of subjects enrolled | Taiwan: 15 |
| Worldwide total number of subjects | 15 |
| EEA total number of subjects | 0 |

Notes:

### Subjects enrolled per age group

| | |
|---|---|
| In utero | 0 |
| Preterm newborn - gestational age < 37 wk | 0 |
| Newborns (0-27 days) | 0 |
| Infants and toddlers (28 days-23 months) | 15 |
| Children (2-11 years) | 0 |
| Adolescents (12-17 years) | 0 |
| Adults (18-64 years) | 0 |
| From 65 to 84 years | 0 |
| 85 years and over | 0 |

## Subject disposition

### Recruitment

Recruitment details: -

### Pre-assignment

Screening details:

During the screening the following steps occurred: check for inclusion/exclusion criteria, contraindications/precautions, medical history of the subjects and signing informed consent forms.

### Period 1

| | |
|---|---|
| Period 1 title | Overall Trial (overall period) |
| Is this the baseline period? | Yes |
| Allocation method | Not applicable |
| Blinding used | Not blinded |

### Arms

| | |
|---|---|
| **Arm title** | Rotarix Group |

Arm description:

Subjects received 2 oral doses of Rotarix vaccine at 2 and 4 months of age.

| | |
|---|---|
| Arm type | Experimental |
| Investigational medicinal product name | Rotarix |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Oral suspension |
| Routes of administration | Oral use |

Dosage and administration details:

Subjects received 2 oral doses of Rotarix (HRV) vaccine at 2 and 4 months of age.

| **Number of subjects in period 1** | Rotarix Group |
|---|---|
| Started | 15 |
| Completed | 15 |

## Baseline characteristics

| Reporting groups | |
|---|---|
| Reporting group title | Rotarix Group |
| Reporting group description: | |
| Subjects received 2 oral doses of Rotarix vaccine at 2 and 4 months of age. | |

| Reporting group values | Rotarix Group | Total | |
|---|---|---|---|
| Number of subjects | 15 | 15 | |
| Age categorical<br>Units: Subjects | | | |
| In utero | 0 | 0 | |
| Preterm newborn infants (gestational age < 37 wks) | 0 | 0 | |
| Newborns (0-27 days) | 0 | 0 | |
| Infants and toddlers (28 days-23 months) | 15 | 15 | |
| Children (2-11 years) | 0 | 0 | |
| Adolescents (12-17 years) | 0 | 0 | |
| Adults (18-64 years) | 0 | 0 | |
| From 65-84 years | 0 | 0 | |
| 85 years and over | 0 | 0 | |
| Age continuous<br>Units: weeks | | | |
| arithmetic mean | 8.9 | | |
| standard deviation | ± 0.8 | - | |
| Gender categorical<br>Units: Subjects | | | |
| Female | 8 | 8 | |
| Male | 7 | 7 | |

## End points

### End points reporting groups

| Reporting group title | Rotarix Group |
|---|---|

Reporting group description:

Subjects received 2 oral doses of Rotarix vaccine at 2 and 4 months of age.

### Primary: Number of seroconverted subjects for serum anti-rotavirus immunoglobulin A (igA) antibody

| End point title | Number of seroconverted subjects for serum anti-rotavirus immunoglobulin A (igA) antibody[1] |
|---|---|

End point description:

Seroconversion is defined as the appearance of IgA antibody concentration equal to or above (≥) 20 Units per millilitre (U/mL) in the serum of subjects who were seronegative before vaccination. A seronegative subject is a subject with anti-rotavirus IgA antibody concentration below (<) 20 U/mL. The According-To-Protocol cohort for immunogenicity included subjects who received Hepatitis B immunoglobulin after birth, who were seronegative for serum anti-RV IgA antibody at Day 0, who complied with vaccination schedule for the Rotarix vaccine, who had no RV other than the vaccine strain in gastroenteritis stool sample up to Month 4.

| End point type | Primary |
|---|---|

End point timeframe:

2 months post-Dose 2 (at study Month 4)

Notes:

[1] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: The analysis of the primary endpoint was descriptive i.e. no statistical hypothesis test was performed.

| End point values | Rotarix Group | | | |
|---|---|---|---|---|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 15 | | | |
| Units: Subjects | | | | |
| ≥20 U/mL | 15 | | | |

### Statistical analyses

No statistical analyses for this end point

### Secondary: Serum anti-rotavirus IgA antibody concentrations

| End point title | Serum anti-rotavirus IgA antibody concentrations |
|---|---|

End point description:

Concentrations were expressed as geometric mean antibody concentration in units per millilitre (U/mL), calculated on all subjects.
The According-To-Protocol cohort for immunogenicity included subjects who received Hepatitis B immunoglobulin after birth, who were seronegative for serum anti-RV IgA antibody at Day 0, who complied with vaccination schedule for the Rotarix vaccine, who had no RV other than the vaccine strain in gastroenteritis stool sample up to Month 4.

| End point type | Secondary |
|---|---|

End point timeframe:

2 months post-Dose 2 (at study Month 4)

| **End point values** | Rotarix Group | | | |
|---|---|---|---|---|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 15 | | | |
| Units: U/mL | | | | |
| geometric mean (confidence interval 95%) | | | | |
| GMC (U/mL) | 254.7 (145 to 447.7) | | | |

## Statistical analyses

No statistical analyses for this end point

## Secondary: Number of subjects reporting solicited general symptoms

| End point title | Number of subjects reporting solicited general symptoms |
|---|---|

End point description:

Solicited general symptoms assessed were cough, diarrhoea, irritability, loss of appetite, temperature (any temperature was defined as a tympanic on rectal setting temperature ≥ 38.0 degrees Celsius) and vomiting.
The Total vaccinated cohort included all subjects with at least one vaccine administration documented.

| End point type | Secondary |
|---|---|

End point timeframe:

During the 8-day (Days 0-7) post-vaccination period

| **End point values** | Rotarix Group | | | |
|---|---|---|---|---|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 15 | | | |
| Units: Subjects | | | | |
| Cough | 6 | | | |
| Diarrhoea | 1 | | | |
| Irritability | 11 | | | |
| Loss of appetite | 10 | | | |
| Temperature (Tympanic on rectal seting (≥38.0°C)) | 5 | | | |
| Vomiting | 2 | | | |

## Statistical analyses

No statistical analyses for this end point

## Secondary: Number of subjects with rotavirus (RV) present in the gastroenteritis (GE) stool sample

| End point title | Number of subjects with rotavirus (RV) present in the gastroenteritis (GE) stool sample |
|---|---|

End point description:

RV was not identified in the one GE stool sample collected in the study. Two subjects reported GE episode between vaccination Dose 1 and before vaccination Dose 2. For one of them, GE stool sample was not collected and for the other subject no RV was identified in the GE stool sample. GE symptoms were defined as diarrhoea with or without vomiting. A GE stool sample was collected as soon as possible after the illness began by the parent/guardian of the subject. Presence of RV antigen was detected by Enzyme-linked immunosorbent assay (ELISA).
The Total vaccinated cohort included all subjects with at least one vaccine administration documented.

| End point type | Secondary |
|---|---|

End point timeframe:

From Day 0 (first vaccine dose) to study Month 4 (2 months post-Dose 2)

| **End point values** | Rotarix Group | | | |
|---|---|---|---|---|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 15 | | | |
| Units: Subjects | | | | |
| RV present in the GE stool samples | 0 | | | |

### Statistical analyses

No statistical analyses for this end point

## Secondary: Number of subjects reporting unsolicited adverse events (AEs)

| End point title | Number of subjects reporting unsolicited adverse events (AEs) |
|---|---|

End point description:

An unsolicited adverse event is any adverse event (i.e. any untoward medical occurrence in a patient or clinical investigation subject, temporally associated with use of a medicinal product, whether or not considered related to the medicinal product) reported in addition to those solicited during the clinical study and any solicited symptom with onset outside the specified period of follow-up for solicited symptoms.
The Total vaccinated cohort included all subjects with at least one vaccine administration documented.

| End point type | Secondary |
|---|---|

End point timeframe:

Within the 31-day (Days 0-30) follow-up period after vaccination

| End point values | Rotarix Group | | | |
|---|---|---|---|---|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 15 | | | |
| Units: Subjects | | | | |
| Unsolicited AEs | 4 | | | |

### Statistical analyses

No statistical analyses for this end point

## Secondary: Number of subjects reporting serious adverse events (SAEs)

| End point title | Number of subjects reporting serious adverse events (SAEs) |
|---|---|

End point description:

SAEs assessed include medical occurrences that results in death, are life threatening, require hospitalization or prolongation of hospitalization, results in disability/incapacity or are a congenital anomaly/birth defect in the offspring of a study subjects.
The Total vaccinated cohort included all subjects with at least one vaccine administration documented.

| End point type | Secondary |
|---|---|

End point timeframe:

During the entire study period (from Dose 1 at Day 0 up to Month 4)

| End point values | Rotarix Group | | | |
|---|---|---|---|---|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 15 | | | |
| Units: Subjects | | | | |
| SAEs | 1 | | | |

### Statistical analyses

No statistical analyses for this end point

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

SAEs: During the entire study period (from Dose 1 at Day 0 up to Month 4). Unsolicited AEs: Within the 31-day (Days 0-30) follow-up period after vaccination. Solicited general symptoms: During the 8-day (Days 0-7) post vaccination period.

Adverse event reporting additional description:

The number of occurrences reported for solicited symptoms, adverse events, and serious adverse events were not available for posting. The number of subjects affected by each specific event was indicated as the number of occurrences.

| | |
|---|---|
| Assessment type | Non-systematic |

### Dictionary used

| | |
|---|---|
| Dictionary name | MedDRA |
| Dictionary version | 14.0 |

### Reporting groups

| | |
|---|---|
| Reporting group title | Rotarix Group |

Reporting group description:

Subjects received 2 oral doses of Rotarix vaccine at 2 and 4 months of age.

| **Serious adverse events** | Rotarix Group | | |
|---|---|---|---|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 1 / 15 (6.67%) | | |
| number of deaths (all causes) | 0 | | |
| number of deaths resulting from adverse events | | | |
| Infections and infestations | | | |
| Bronchiolitis | | | |
| subjects affected / exposed | 1 / 15 (6.67%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |

Frequency threshold for reporting non-serious adverse events: 5 %

| **Non-serious adverse events** | Rotarix Group | | |
|---|---|---|---|
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 13 / 15 (86.67%) | | |
| General disorders and administration site conditions | | | |
| Cough | | | |
| alternative assessment type: Systematic | | | |

| | | | |
|---|---|---|---|
| subjects affected / exposed | 6 / 15 (40.00%) | | |
| occurrences (all) | 6 | | |
| Diarrhoea | | | |
| alternative assessment type: Systematic | | | |
| subjects affected / exposed | 1 / 15 (6.67%) | | |
| occurrences (all) | 1 | | |
| Irritability | | | |
| alternative assessment type: Systematic | | | |
| subjects affected / exposed | 11 / 15 (73.33%) | | |
| occurrences (all) | 11 | | |
| Loss of appetite | | | |
| alternative assessment type: Systematic | | | |
| subjects affected / exposed | 10 / 15 (66.67%) | | |
| occurrences (all) | 10 | | |
| Temperature | | | |
| alternative assessment type: Systematic | | | |
| subjects affected / exposed | 5 / 15 (33.33%) | | |
| occurrences (all) | 5 | | |
| Vomiting | | | |
| alternative assessment type: Systematic | | | |
| subjects affected / exposed | 2 / 15 (13.33%) | | |
| occurrences (all) | 2 | | |
| Skin and subcutaneous tissue disorders | | | |
| Eczema | | | |
| subjects affected / exposed | 2 / 15 (13.33%) | | |
| occurrences (all) | 2 | | |
| Rash | | | |
| subjects affected / exposed | 1 / 15 (6.67%) | | |
| occurrences (all) | 1 | | |
| Infections and infestations | | | |
| Bronchiolitis | | | |
| subjects affected / exposed | 1 / 15 (6.67%) | | |
| occurrences (all) | 1 | | |
| Nasopharyngitis | | | |

| | | | |
|---|---|---|---|
| subjects affected / exposed | 1 / 15 (6.67%) | | |
| occurrences (all) | 1 | | |
| Pharyngitis | | | |
| subjects affected / exposed | 1 / 15 (6.67%) | | |
| occurrences (all) | 1 | | |
| Upper respiratory tract infection | | | |
| subjects affected / exposed | 1 / 15 (6.67%) | | |
| occurrences (all) | 1 | | |

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

None reported